ELSEVIER

General Subjects

Vol. 1336, 1997

BIOCHIMICA ET BIOPHYSICA ACTA
BBA

Cumulative Contents

Information for Contributors vii

Rapid report

Prolonging the circulation time and modifying the body distribution of intravenously injected polystyrene nanospheres by prior intravenous administration of poloxamine-908. A 'hepatic-blockade' event or manipulation of nanosphere surface in vivo?
S.M. Moghimi (UK) 1

Regular papers

Transepithelial fate of bilirubin in the isolated rat kidney
M.M. Elías, A.D. Mottino and E.J. Ochoa (Argentina) 7

Alterations in the ganglioside composition of rat cortical brain slices during experimental lactic acidosis: implication of an enzymatic process independent of the oxidative stress
L. Barrier, J. Barrier, M. Arnaud, A. Piriou and C. Tallineau (France) 15

Sensory perception and transduction of UV-B radiation by the ciliate *Blepharisma japonicum*
F. Lenci, G. Checcucci, F. Ghetti, D. Gioffrè and A. Sgarbossa (Italy) 23

N-acyl amino acid biosynthesis in marine bacterium, *Deleya marina*
H. Yagi, G. Corzo and T. Nakahara (Japan) 28

Oxidation of carotenoids by free radicals: relationship between structure and reactivity
A.A. Woodall, S.W.-M. Lee, R.J. Weesie, M.J. Jackson and G. Britton (UK) 33

Chromatographic and spectroscopic assignment of thiol induced cycloaromatizations of enediyne in neocarzinostatin
D.-H. Chin, M.-C. Tseng, T.-C. Chuang and M.-C. Hong (Taiwan, ROC) 43

The enantiomeric purity of alcohols formed by enzymatic reduction of ketones can be improved by optimisation of the temperature and by using a high co-substrate concentration
H. Yang, Å. Jönsson, E. Wehtje, P. Adlercreutz and B. Mattiasson (Sweden) 51

Melanin formation in the inner ear is catalyzed by a new tyrosine hydroxylase kinetically and structurally different from tyrosinase
E. Benedito, C. Jiménez-Cervantes, D. Pérez, J.D. Cubillana, F. Solano, J. Jiménez-Cervantes, A.M. Meyer zum Gottesberge, J.A. Lozano and J.C. García-Borrón (Spain, Germany) 59

Generation of nitro and superoxide radical anions from 2,4,6-trinitrobenzenesulfonic acid by rat gastrointestinal cells
W. Chamulitrat and J.J. Spitzer (USA) 73

Selective 'in synthesis' labelling of peptides by fluorochromes
A. Chersi, F. Di Modugno and L. Rosanò (Italy) 83

Chronic ethanol administration decreases rat pancreatic GP2 content
M.V. Apte, I.D. Norton, P.S. Haber, M.A. Korsten, G.W. McCaughan, R.C. Pirola and J.S. Wilson (Australia, USA) 89

Molecular cloning and characterization of the epididymis-specific glutathione peroxidase-like protein secreted in the porcine epididymal fluid
N. Okamura, Y. Iwaki, S. Hiramoto, M. Tamba, S. Bannai, Y. Sugita, P. Syntin, F. Dacheux and J.-L. Dacheux (Japan, France) 99

Glucogenesis in an insect, *Manduca sexta* L., estimated from the ^{13}C isotopomer distribution in trehalose synthesized from [1,3-$^{13}C_2$]glycerol
S.N. Thompson (USA) 110

Regular papers

Artificial glycopolypeptide conjugates: simple synthesis of lactose- and *N,N'*-diacetylchitobiose-substituted poly(L-glutamic acid)s through *N*-β-glycoside linkages and their interaction with lectins
K. Kobayashi, E. Tawada, T. Akaike and T. Usui (Japan) 117

DNA cleavage reaction and linoleic acid peroxidation induced by tea catechins in the presence of cupric ion

F. Hayakawa, T. Kimura, T. Maeda, M. Fujita, H. Sohmiya, M. Fujii and T. Ando (Japan) 123

Cloning, expression, purification, and characterization of the murine lysosomal acid α-mannosidase
R.K. Merkle, Y. Zhang, P.J. Ruest, A. Lal, Y.-F. Liao and K.W. Moremen (USA) 132

Protein thiol modifications of human red blood cells treated with *t*-butyl hydroperoxide
C.-K. Lii and C.-N. Hung (Taiwan, ROC) 147

Chemical characterization of sialyl oligosaccharides isolated from goat (*Capra hircus*) milk
D. Vièrge, L. Grimmonprez and M. Solere (France) 157

High induction of phenol UDP-glucurono - syltransferase in the kidney medulla of β-naphthoflavone-treated rats
H. Yokota, H. Inoue, H. Taniyama, T. Kobayashi, H. Iwano, Y. Kagawa, H. Okada and A. Yuasa (Japan) 165

Effects of the anti-bacterial peptide cecropin B and its analogs, cecropins B-1 and B-2, on liposomes, bacteria, and cancer cells
H.M. Chen, W. Wang, D. Smith and S.C. Chan (Hong Kong) 171

Ethanol represses thymidylate synthase and thymidine kinase at mRNA level in regenerating rat liver after partial hepatectomy
Y. Yoshida, M. Komatsu, A. Ozeki, R. Nango and I. Tsukamoto (Japan) 180

The effects of ageing on the chaperone-like function of rabbit α-crystallin, comparing three methods of assay
B.K. Derham and J.J. Harding (UK) 187

The effect of silver administration on the biosynthesis and the molecular properties of rat ceruloplasmin
F. Hirasawa, Y. Kawarada, M. Sato, S. Suzuki, K. Terada, N. Miura, M. Fujii, K. Kato, Y. Takizawa and T. Sugiyama (Japan) 195

Distribution and regulation of ornithine decarboxylase activity along the villus–crypt axis in the small intestine
T. Tsuchiya, J.J. Herbst, Q. Chen and P. Tso (USA) 202

Characterization of microbial cellulose from a high-producing mutagenized *Acetobacter pasteurianus* strain
C. Bertocchi, D. Delneri, S. Signore, Z. Weng and C.V. Bruschi (Italy) 211

Purification and characterization of an extracellular lectin (Lectin I) from *Agrobacterium radiobacter* NCIM 2443
B. Joshi, J.M. Khire, H. SivaRaman and M.I. Khan (India) 218

Complexes of Fe^{2+} with diethyldithiocarbamate or *N*-methyl-D-glucamine dithiocarbamate as traps of nitric oxide in animal tissues: comparative investigations
V.D. Mikoyan, L.N. Kubrina, V.A. Serezhenkov, R.A. Stukan and A.F. Vanin (Russian Federation) 225

Lysozyme and α-lactalbumin from the milk of a marsupial, the common brush-tailed possum (*Trichosurus vulpecula*)
C.P. Piotte, C.J. Marshall, M.J. Hubbard, C. Collet and M.R. Grigor (New Zealand, Australia) 235

Phosphatase activity regulates superoxide anion generation and intracellular signaling in human neutrophils
J.C. Gay, K. Raddassi, A.P. Truett III and J.J. Murray (USA) 243

Isolation and characterization of small proteoglycans from different zones of the porcine knee meniscus
P.G. Scott, T. Nakano and C.M. Dodd (Canada) 254

Glutathione/Fe^{3+}/O_2-mediated DNA strand breaks and 8-hydroxydeoxyguanosine formation. Enhancement by copper, zinc superoxide dismutase
J.-W. Park and R.A. Floyd (South Korea, USA) 263

Transfer of aminopeptidase activity from prostasomes to sperm
G. Arienti, E. Carlini, R. Verdacchi and C.A. Palmerini (Italy) 269

Metabolism of glycosyl ureides by human intestinal brush border enzymes
F.M. Ruemmele, W.E. Heine, K.M. Keller and M.J. Lentze (Germany) 275

The flavonols quercetin, rutin and morin in DNA solution: UV–vis dichroic (and mid-infrared) analysis explain the possible association between the biopolymer and a nucleophilic vegetable-dye
R. Solimani (Italy) 281

Comparative studies of enhanced iron-mediated production of hydroxyl radical by glutathione, cysteine, ascorbic acid, and selected catechols
A.J. Nappi and E. Vass (USA) 295

Pulsed electromagnetic fields preserve proteoglycan composition of extracellular matrix in embryonic chick sternal cartilage
H. Liu, P. Lees, J. Abbott and J.A. Bee (UK, USA) 303

Identification and measurement of β-endorphin levels in the skin during induced hair growth in mice
J. Furkert, U. Klug, A. Slominski, S. Eichmüller, B. Mehlis, U. Kertscher and R. Paus (Germany, USA) 315

Theophylline metabolism in higher plants
E. Ito, A. Crozier and H. Ashihara (Japan, UK) 323
Synthesis and structure-activity relationships of some pesticides with an α-amino acid function
J.-F. Chollet, C. Delétage, M. Faucher, L. Miginiac and J.-L. Bonnemain (France) 331
The regulation of progesterone and hCG production from placental cells by interleukin-1β
H. Seki, A. Zosmer, M.G. Elder and M.H.F. Sullivan (UK) 342
Binding effect of progesterone on the dynamics of α1-acid glycoprotein
J.R. Albani (France) 349

Information for Contributors v

Short sequence-paper

Molecular cloning of the porcine β-1,2-*N*-acetylglucosaminyltransferase II gene and assignment to chromosome 1q23-q27
T. Leeb, B. Kriegesmann, B.G. Baumgartner, C. Klett, M. Yerle, H. Hameister and B. Brenig (Germany, France) 361

Rapid report

Human salivary histatin-5 exerts potent fungicidal activity against *Cryptococcus neoformans*
H. Tsai and L.A. Bobek (USA) 367

Regular papers

Biochemical characterization of the subunits of the Na^+/K^+ ATPase expressed in insect cells
J.Y. Liu and G. Guidotti (USA) 370
Regulation of cellular phosphorylation of hyaluronan binding protein and its role in the formation of second messenger
Ch.M. Rao, T.B. Deb, S. Gupta and K. Datta (India, USA) 387
Effect of chemical glycosylation of RNase A on the protein stability and surface histidines accessibility in immobilized metal ion affinity electrophoresis (IMAGE) system
W.-O. Baek and M.A. Vijayalakshmi (France) 394
Rat liver ADP-ribose pyrophosphatase-I as an in vitro target of the acetaminophen metabolite *N*-acetyl-*p*-benzoquinoneimine
J.M. Ribeiro, A. Agudo, M.J. Costas and J.C. Cameselle (Spain) 403
Mutual interaction between glycation and oxidation during non-enzymatic protein modification
N. Traverso, S. Menini, D. Cottalasso, P. Odetti, U.M. Marinari and M.A. Pronzato (Italy) 409
Antigenic determination fragments of alpha-momorcharin
K.C. Leung, Z.Q. Meng and W.K.K. Ho (Hong Kong, China) 419
Purification and characterization of prostate specific antigen from human urine
K. Shibata, J.-i. Kajihara, K. Kato and K. Hirano (Japan) 425
The determination of magnesium in human blood plasma by ^{31}P magnetic resonance spectroscopy using a macrocyclic reporter ligand
J. Huskens, M. Main, C.R. Malloy and A.D. Sherry (USA) 434
Inhibition of angiogenesis in vitro and in vivo: comparison of the relative activities of triflavin, an Arg-Gly-Asp-containing peptide and anti-$\alpha_v\beta_3$ integrin monoclonal antibody
J.-R. Sheu, M.-H. Yen, Y.-C. Kan, W.-C. Hung, P.-T. Chang and H.-N. Luk (Taiwan) 445
Structural and functional modifications of bovine trypsin by heparins Influence of heparin molecular mass and structure
N. Volpi (Italy) 455
Effects of zero magnetic field on the conformation of chromatin in human cells
I.Ya. Belyaev, Y.D. Alipov and M. Harms-Ringdahl (Sweden, Russia) 465
The role of pyruvate dehydrogenase, phosphofructo-1-kinase and acetyl-CoA carboxylase in the regulation of fatty acid synthesis in the lactating rat mammary gland during the starved to re-fed transition
K. Hagopian and M.R. Munday (UK) 474
Synthesis, physical and biological properties of lithocholyl-lysyl-fluorescein: A fluorescent monohydroxy bile salt analogue with cholestatic properties
C.O. Mills, P. Milkiewicz, D.P. Molloy, D.J. Baxter and E. Elias (UK) 485
Kinetics of heme interaction with heme-binding proteins: The effect of heme aggregation state
K. Kuželová, M. Mrhalová and Z. Hrkal (Czech Republic) 497
Nitric oxide formation from hydroxylamine by myoglobin and hydrogen peroxide
J. Taira, V. Mišík and P. Riesz (USA, Slovak Republic) 502

The inhibitory action of fatty acids on DNA polymerase β
Y. Mizushina, S. Yoshida, A. Matsukage and K. Sakaguchi (Japan) 509

Characterization of a strictly specific acid β-galactosidase from *Achatina achatina*
S. Leparoux, M. Padrines, G. Placier and B. Colas (France) 522

Prostasome to sperm transfer of CD13/aminopeptidase N (EC 3.4.11.2)
G. Arienti, E. Carlini, R. Verdacchi, E.V. Cosmi and C.A. Palmerini (Italy) 533

Chemical characterization of pheomelanogenesis starting from dihydroxyphenylalanine or tyrosine and cysteine. Effects of tyrosinase and cysteine concentrations and reaction time
H. Ozeki, S. Ito, K. Wakamatsu and I. Ishiguro (Japan) 539

Administration of ATP–$MgCl_2$ following hemorrhage and resuscitation increases hepatic phosphoenolpyruvate carboxykinase and decreases pyruvate kinase activities
M.S.W. Mahmoud, P. Wang and I.H. Chaudry (USA) 549

Carbohydrate analysis of porcine thyroglobulin isoforms with different iodine contents
M. Ikekita, H. Yajima, T. Murata, K. Takatera, T. Watanabe, M. Sonoyama, Y. Tezuka, T. Ishii and O. Tarutani (Japan) 557

Cyanate causes depletion of ascorbate in organisms
I. Koshiishi, Y. Mamura and T. Imanari (Japan) 566

Carotenoids and protection of phospholipids in solution or in liposomes against oxidation by peroxyl radicals: Relationship between carotenoid structure and protective ability
A.A. Woodall, G. Britton and M.J. Jackson (UK) 575

Erratum

Erratum to "Magnetic resonance microscopy studies of cation diffusion in cartilage" [Biochim. Biophys. Acta 1334 (1997) 129–139]
K. Potter, R.G.S. Spencer and E.W. McFarland (USA) 587

Cumulative contents 589

Author index 593